



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/499,027	02/07/2000	Masahiro Hosoda	900-318	9626

7590 04/01/2002

NIXON & VANDERHYE P.C.  
1100 North Glebe Road  
8th Floor  
Arlington, VA 22201-4714

EXAMINER

FLORES RUIZ, DELMA R

ART UNIT PAPER NUMBER

2828

DATE MAILED: 04/01/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/499,027

Applicant(s)

HOSODA ET AL.

Examiner

Delma R. Flores Ruiz

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 February 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 12-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.


## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

  
Paul Ip  
Primary Examiner

## DETAILED ACTION

### *Specification*

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Semiconductor laser device.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 4, are 6 – 9, are rejected under 35 U.S.C. 102(e) as being anticipated by Motoda et al (5,872,002).

**Regarding claims 1, 4, and 6 – 9** Motoda discloses a semiconductor laser device comprising; a plurality of semiconductor laser resonators having light emitting layers of materials different from each other, the semiconductor laser resonators being provided on the same semiconductor substrate so that the light emitting layers lie substantially in parallel to a main surface of the semiconductor substrate, and a high-resistance region provided between the semiconductor laser resonators (Figs 14 – 30, Column 5, lines 49 – 54, Column 6, lines 46 – 55). The semiconductor laser resonators are constituted by two resonators having oscillation wavelength in a red region and an infrared region, respectively (Column 31, lines 46 – 48). The light emitting layers of the semiconductor laser resonators lie at substantially the same distance from the main surface of the semiconductor substrate (Figs. 6 (a-d)). The semiconductor laser resonators each have a refractive index wave-guiding structure. The high resistance regions is formed as a sufficient air gap and high resistively semiconductor layer having a sufficient resistance for electrically isolating adjacent semiconductor laser resonator (Column 5, lines 60 – 67, Column 6, lines 1 – 10, and Column 30, lines 53 – 65).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 5, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motoda et al (5,872,002) in view of Tanaka et al (5,974,069).

***Regarding claims 2, 3, 5, and 10***, Motoda discloses the claimed invention except for semiconductor substrate is a GaAs, and the resonator having oscillation wavelength in a red region includes a light emitting layer formed of an InGaP based material and the resonator having an oscillation wavelength in an infrared region includes a light emitting layers formed of a GaAs based material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to semiconductor substrate is a GaAs, and the resonator having oscillation wavelength in a red region includes a light emitting layer formed of an InGaP based material and the resonator having an oscillation wavelength in an infrared region includes a light emitting layers formed of a GaAs based material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Motoda et al (5,872,002) in view of Doi et al (5,793,790).

It would have been obvious at the time of applicant's invention, to combine Doi of teaching an incorporated in a recording and reproducing apparatus capable of performing recording and reproducing for both CD and DVD with semiconductor laser device because the CD and DVD use to reproducing and data reading operation. The semiconductor laser device is usually incorporated for use in an optical pick up in a recording and reproducing apparatus capable of performing the recording and reproducing operation.

### ***Conclusion***

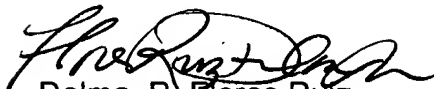
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (703) 308-6238. The examiner can normally be reached on M - F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Application/Control Number: 09/499,027  
Art Unit: 2828

Page 6

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.

  
Delma R. Flores Ruiz  
Examiner  
Art Unit 2828

Paul Ip  
Supervisor Patent Examiner  
Art Unit 2828

Drfr  
March 22, 2002